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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/681,655	05/16/2001	Lawrence O'Gorman	264/243	1011
30423	7590 04/19/2002			
STMICROELECTRONICS, INC.			EXAMINER	
MAIL STATION 2346 1310 ELECTRONICS DRIVE CARROLLTON, TX 75006			AHMED, SAM	IR ANWAR
			ART UNIT	PAPER NUMBER
			2623	( ^
			DATE MAILED: 04/19/2002	Ų

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. **09/681,655** 

Applicant(s)

Lawrence O'Gorman

Examiner

Samir Ahmed

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The MAILING DATE of this communication app	pears on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS THE MAILING DATE OF THIS COMMUNICATION.	S SET TO EXPIRE 3 MONTH(S) FROM
<ul> <li>Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days,</li> </ul>	ation.
be considered timely.	
<ul> <li>If NO period for reply is specified above, the maximum statutory p communication.</li> </ul>	eriod will apply and will expire SIX (6) MONTHS from the mailing date of this
<ul> <li>Failure to reply within the set or extended period for reply will, by s</li> <li>Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	tatute, cause the application to become ABANDONED (35 U.S.C. § 133).  nailing date of this communication, even if timely filed, may reduce any
Status	
1) 🕅 Responsive to communication(s) filed on <u>Mar 1</u>	4, 2002
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.
3) Since this application is in condition for allowand closed in accordance with the practice under	ce except for formal matters, prosecution as to the merits is Ex parte Quayl@35 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-20</u>	is/are pending in the applica
4a) Of the above, claim(s) <u>4, 7, 10, and 12-20</u>	is/are withdrawn from considera
5)	is/are allowed.
6) 🔀 Claim(s) <u>1-3, 5, 6, 8, 9, and 11</u>	is/are rejected.
7) 🗌 Claim(s)	is/are objected to
8)	are subject to restriction and/or election requirem
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on	is/are objected to by the Examiner.
11) The proposed drawing correction filed on	is: a∭ approved b)∭disapproved.
12)  The oath or declaration is objected to by the Example 1	miner.
Priority under 35 U.S.C. § 119	
13) $\square$ Acknowledgement is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d).
a) All b) Some* c) None of:	
<ol> <li>Certified copies of the priority documents have</li> </ol>	ave been received.
2.  Certified copies of the priority documents have	ave been received in Application No
application from the International Bur	
*See the attached detailed Office action for a list of	
14) Acknowledgement is made of a claim for domest	ic priority drider 30 0.3.0. & 113(c).
Attachment(s)	_
15) X Notice of References Cited (PTO-892)	18) X Interview Summary (PTO-413) Paper No(s)
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) X Information Disclosure Statement(s) (PTO-1449) Paper No(s)2	20)

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1. Applicant's election without traverse of the species illustrated in the figures and embodiments of Figs 1A-1E (claims 1-3, 5-6, 8-9, 11) in Paper No. 5 is acknowledged.

- 2. Claims 4, 7, 10, and 12-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 5.
- 3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: the oath or declaration is for application Serial Number 09/169,894.

4. This application discloses and claims only subject matter disclosed in prior Application No. 09/169,894, filed 10/12/98, and names an inventor or inventors named in the prior application. Accordingly, this application may constitute a continuation or division. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

#### Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: item 113 in Figs 1B and 1C, item 120 in Fig 1D, item 220 in Fig. 2, item 400 in Fig. 4A and item 810 in Fig. 8A. Correction is required.

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6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: item 185 in Fig 1E.

Correction is required.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "812" has been used to designate both the sliding unit and the button. Correction is required.

### Specification

8. The disclosure is objected to because of the following informalities: on page 6, lines 1-2, reference character "189" has been used to designate both the locating pin and the fastening hole.

Appropriate correction is required.

# Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1-2, 5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salatino et al. (US Patent 5,920,640) in view of Kazuaki Date (Japanese Patent Publication 64-65676).

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As to claim 1, Salatino discloses an enclosure assembly for a fingerprint sensor (sensor 30 in Fig. 1 includes a housing or package 51 also col. 5, lines 37-39), the enclosure assembly comprising:

a stationary member including at least two substantially parallel sidewalls, the sidewalls partially defining a cavity in which the fingerprint sensor is disposed [Fig. 1, package 51 includes the fingerprint sensor 30;

a moveable access piece, which has a surface area larger than the surface area of the fingerprint sensor, the moveable access piece having a conductive portion electrically coupled to ground, wherein the moveable access piece is configured to move relative to the stationary member [a movable electrically conductive cover 53' for covering the opening to the exposed upper dielectric layer 52 of the fingerprint sensor. The cover 53' is connected to an earth ground. A charge would be bled from the finger as the cover 53' is moved to expose the sensing portion of the sensor 30 (col. 7, lines 23-38, Fig. 4). Salatino discloses a movement apparatus configured to allow motion of the moveable access piece relative to the stationary member so as to expose the fingerprint sensor [cover 53' (the moveable access piece) is slidably connected to the package 51(the stationary member) (col. 7, lines 31-34). The cover 53' is moved by the finger to expose the sensing portion of the sensor 30 (col. 7, lines 36-38).

Salatino does not exciplicitly disclose,

a movement apparatus configured to maintain the moveable access piece in a position covering the fingerprint sensor.

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Date discloses a fingerprint input device, wherein the transparent body 2 of the fingerprint sensor is usually covered with the protection cover 1, and at the time of impressing a finger print, the cover 1 is slided with a finger 3 in an arrow F direction expose the transparent body 2. A spring 14 (movement apparatus) energizes a spring guide 10 fitted to the cover 1 in the closing direction to maintain the cover 1 (the moveable access piece) in a position covering the transparent body 2 of the fingerprint sensor (Abstract, Fig. 1). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use the teaching of Date to modify the enclosure assembly of Salatino by using a spring (movement apparatus) fitted to maintain the cover (the moveable access piece) in a position covering the fingerprint sensor in order to protect the fingerprint sensor surface from being made dirty or damaged.

As to claim 2, Date further discloses, a spring to engage the moveable access piece and the stationary member, the spring configured to apply sufficient pressure to the moveable access piece so as to generally maintain the moveable access piece in the position covering the fingerprint sensor (Fig. 1, spring 14, cover 1 [the moveable access piece], transparent body 2 of the fingerprint sensor).

As to claim 5, Date further discloses, further comprising a switch configured to electrically couple a power supply to the fingerprint sensor after the moveable access piece exposes at least a portion of the cavity [Fig. 2, contacts 11, 13 are closed when cover 1 is opened and an On electric signal is fetched to start fingerprint sensor].

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As to claim 8 refer to claim 1 rejection for their common features. Date further discloses, a switch configured to electrically couple a power supply to the fingerprint sensor after the moveable access piece exposes at least a portion of the cavity [Fig. 2, contacts 11, 13 are closed when cover 1 is opened and an On electric signal is fetched to start fingerprint sensor].

As to claim 9, refer to claim 2 rejection.

11. Claims 3, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salatino et al. (US Patent 5,920,640) in view of Kazuaki Date (Japanese Patent Publication 64-65676) as applied to claims 2, 8 above and further in view of Thomopoulos et al. (US Patent 5,978,495).

As to claim 3, neither Salatino nor Date discloses, further comprising an image quality indictor means communicatively coupled to the fingerprint sensor, the image quality indictor configured to signal whether biometric information collected by the fingerprint sensor is acceptable.

Thomopoulos discloses a fingerprint device that during the scanning process, the scanned finger is monitored to determine the quality of the image. Audible and visual feedback (quality indicator) is provided to assist the user better position the finger and repeat the process (Abstract, lines 12-18, col. 5, lines 47-60). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use the teaching of Thomopoulos to modify the combined enclosure assembly of Salatino and Date by using audio and visual indicator to indicate to the user the quality of the image scanned by the fingerprint sensor in order to guarantee that the quality of the fingerprint image is such that the false rejection probability is low.

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As to claim 11, refer to claim 3 rejection.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salatino et al. (US Patent 5,920,640) in view of Kazuaki Date (Japanese Patent Publication 64-65676) as applied to claim 1 above and further in view of Tadashi Amano (Japanese Patent Publication 4-88586).

As to claim 6, neither Salatino nor Date discloses, wherein the moveable access piece has a first end and a second end, the first end having a concave surface portion configured to receive a fingertip.

Amano discloses a fingerprint device wherein a covering means to be slidable in the inserting direction of the finger and to cover the sensor's contact surface when the finger is not in contact with the sensor(Abstract). The flange part 13 of the slidable cover pushed by the tip of the finger 12 has a first and second ends, the first end having a concave surface portion configured to receive the fingertip of finger 12 (Figs 1A and 1B). It would have been obvious to one with ordinary skill in the art at the time the invention was made to use the teaching of Amano to modify the combined enclosure assembly of Salatino and Date by using a slidable cover has a first end and a second end, the first end having a concave surface portion configured to receive the fingertip of the finger in order to protect the fingerprint sensor surface from being made dirty or damaged..

# **Contact Information**

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Samir Ahmed whose telephone number is (703) 305-9870. The examiner can normally be reached on Monday to Friday from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Au, Amelia can be reached on (703) 308-6604. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

SA

4/8/02

BAMIR AHMED DRIMARY EXAMINER